

Climate Change Response Strategy



April, 2013

PWR-NPS

Introduction

National Park Service Director Jarvis identified climate change as “...fundamentally the greatest threat to the integrity of our national parks that we have ever experienced” (NPS Climate Change Response Strategy, 2010). Park stewards face the challenge of preserving natural and cultural resources unimpaired in the context of these unprecedented changes to natural environments. Addressing this issue is a priority for the National Park Service as a whole and for the Pacific West Region in particular.

Recognizing that climate change is a complicated issue with interdisciplinary challenges and solutions, the PWR Climate Change Response Strategy (PWR Strategy) aligns the regional office to support and complement national and park efforts to address climate change. It provides region-wide goals for engaging in climate change response, and includes specific objectives and actions that will be implemented at the regional office level to advance those goals.

Purpose of the Strategy

The purposes of the PWR Climate Change Response Strategy are:

- To capture and advance the region’s support for national climate change response efforts
- To elevate the excellent work currently being done in PWR parks, to help communicate those successes across the region in a consistent way, and to identify where there are opportunities to increase impact
- To enhance communication among existing groups and teams that are focused on climate change response
- To identify organizational capacities that the regional office must develop in order to meet the interdisciplinary challenges associated with climate change
- To support a continuous conversation and learning process within the region and beyond

***From the
Regional
Director***



Climate change is an enormous challenge facing our national parks. Responding to this challenge is a key priority for me in the Pacific West Region. The PWR Climate Change Response Strategy provides a vision and goals we can embrace together as a framework to celebrate successes, enhance accomplishments, and complement our strengths as climate change response leaders.

While the strategy includes broad regional goals, the strategy itself aims to support and promote information sharing, organization, and collaboration across parks, networks, the regional office, and our partners. The strategy does not prescribe park actions but rather relies upon park-based initiatives, creativity, and innovation. Already we are leaders in this effort. The strategy will help bring together our great climate change work and support our future endeavors.

Please join me in using this strategy to promote efforts now underway and many more to come.

***Christine S. Lehnertz
Regional Director
Pacific West Region***

Components of the Strategy

Of the four main components of the strategy, two apply to the Pacific West Region broadly and two are designed for use by more specific audiences:

- The **Vision** and **Goals** provide strategic direction for regional office (PWRO) programs and PWR parks.
- The **Action Plan** lays out steps that the regional office (PWRO) and associated region-wide programs and teams will take to further the goals.
- The **Park Actions Toolkit** provides examples of best practices and actions that parks in the region are or can take to build or advance park-specific climate change response strategies.

Strategy Component	PWR PARKS	REGIONAL OFFICE
Vision	X	X
Goals	X	X
Action Plan	-	X
Park Actions	X	-

A strategy for the Pacific West Region

How the Strategy Relates to PWR Parks

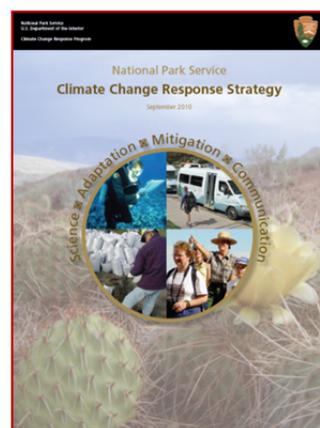
This strategy does not prescribe any specific actions for parks to take. Rather, it is meant to help parks strengthen their responses to climate change by providing a way to organize park-specific responses, if needed, and by identifying the role the regional office can play in supporting parks as they develop and/or further their climate change responses. While there is an expectation that parks will take steps to advance broad regional goals, the specifics of those steps are and will continue to be determined by parks.

How the Regional Strategy Relates to the National Strategy and Plans

In 2010, the National Park Service Climate Change Response Program released the national *NPS Climate Change Response Strategy* (National Strategy). The National Strategy establishes broad-based, interdisciplinary climate change response goals under four pillars of focus: adaptation, mitigation, science, and communication.

The PWR Strategy provides regional climate change response guidance within the framework provided by the National Strategy. It also responds to other relevant agency and departmental plans, guidance, and priorities. The PWR Strategy goals:

- Apply to one or more National Strategy pillars (science, adaptation, mitigation, and communication)
- Complement or directly support other regional or national priorities (e.g., NPS Green Parks Plan, NPS A Call to Action, DOI America's Great Outdoors, and PWR New Connections)
- Depend on and help enhance collaboration across divisions
- Reflect the role and function of the regional office and parks



In 2012, the Climate Change Response Program released the national *Climate Change Response Action Plan*. Actions detailed in the PWRO Action Plan support and are interrelated to the actions outlined in national action plan.

How the Regional Strategy Relates to Partners and Other Agencies

The PWR will work with other bureaus and partners and will link to local, state, tribal, regional, and national efforts to implement components of the strategy.

PWR Climate Change Response Strategy

VISION

In 2023 (10 years), the Pacific West Regional Office is optimally aligned and engaged such that the Pacific West Region has, and proactively applies, the knowledge, commitment, tools, and skills to collaboratively integrate climate change considerations into daily and strategic decision-making and to build resilience within our parks and beyond.

GOALS

The eight goals on the next page are designed to align PWR regional office activities in support of park and NPS climate change response. The goals serve to complement park-specific climate change priorities and actions. By working toward these goals, the Regional Office will support park-specific climate change response. These goals connect our individual and collective efforts to the PWR climate change response vision and increase our ability to make an impact in a coordinated way.

These goals strengthen our organizational capacity by helping to ensure that PWR staff, visitors, partners, and other stakeholders:

- Know the causes and implications of a changing global climate, understand the role they play, and understand the role their partners can play [Information]
- Care about the issues related to climate change and can articulate how climate change response relates to their daily lives and professional duties [Connection]
- Have the technical or management skills, tools, knowledge, and opportunity to take action [Ability]

Unpacking the Vision Statement

To capture the depth of discussion around the Pacific West Region's vision for 2022, the following elaborates on each component of the vision statement:

- **"PWR has and proactively applies the knowledge, commitment, tools and skills"** refers to => using the best science and sustainable practices; developing necessary technical and team skills; providing leadership and clarity; using new or better tools to understand our environment
- **"to collaboratively"** refers to => strengthening partnerships and our participation in those partnerships; having a coordinated strategic response across the region and beyond park boundaries
- **"integrate climate change considerations"** refers to => adapting to changing conditions in all aspects of our work; considering decisions within a climate change response framework
- **"into daily and strategic decision-making"** refers to => influencing both park staff, partner, and visitor daily decisions and well as long term strategic investments for the region; influencing decisions that help slow climate change – e.g., carbon neutrality (strategic investment), public education or visitor transit (day to day decisions), etc.
- **"build resilience within our parks"** refers to => sustaining a healthy and diverse ecosystem; identifying adaptation strategies for both natural and human-made resources and implementing those strategies
- **"and beyond"** refers to => working with entities outside park boundaries

[Information] x [Connection] x [Ability] = Strategic Action
"I Know" "I Care" "I Can" "We Will"

Strategic goals combine all three learning domains – Cognitive, Affective, and Behavioral

PWR Climate Change Response Goals

1. Vision and Leadership at all Scales

Convey visible and consistent messaging and recognition from leadership throughout the region that underscores the PWR's priorities and approaches to climate change response, in order to **support initiative across the organization and empower PWR to be a leader in addressing climate change.**

2. Information Exchange and Participation

Facilitate the exchange of information related to climate change and create and enhance linkages throughout the Pacific West Region and beyond, in order to **engage staff, partner, community and other stakeholder participation in seeking, implementing and improving climate change response efforts through PWR.**

3. Public Education and Civic Engagement

Utilize parks as centers of collaborative learning, in order to **elevate the public's awareness and understanding of the urgency of climate change, improve our ability to communicate trends and changes in natural systems, and build leadership capacity with partners, communities, and other stakeholders.**

4. Understanding of Climate Change Impacts

Inventory and monitor key attributes of the natural systems, cultural resources, and visitor experiences in our parks that are likely to be affected by climate change in order to **expand our understanding of the impacts a changing global climate could have on park resources, visitor experience, and communities throughout the region.**

5. Science-informed Decisions

Collaborate with sister agencies, partners and the public to develop, test, and appropriately apply climate change related models and tools to PWR activities in order to **ensure decisions, communication, and landscape-level and park-specific priorities are informed by sound science and scientific method.**

6. Ecosystem Resilience

Implement park-specific strategies that enhance the restoration, conservation, and preservation of park resources and reduce non-climate stressors, in order to **promote ecosystem and landscape resilience within and beyond park boundaries throughout the region.**

7. Protection of the Built Environment and Cultural Resources through Risk Assessment and Adaptation

Implement park-specific strategies and engage partners, in order to **address vulnerability risks to cultural resources, trails, buildings and other aspects of our built environment in parks and communities we assist.**

8. Mitigation through Climate Friendly Practices and Operations

Support the Green Parks Plan and Climate Friendly Parks through various processes including Environmental Management Systems, in order to **substantially reduce our carbon footprint and work towards becoming carbon neutral in park operations.**

ACTIONS

Whereas the eight goals above articulate the Pacific West Region’s response to a changing global climate, actions describe what regional offices and parks can do and are doing in the near term to make progress on the goals. As illustrated in Figure 1 below, the actions are described in two components that support this Strategy.

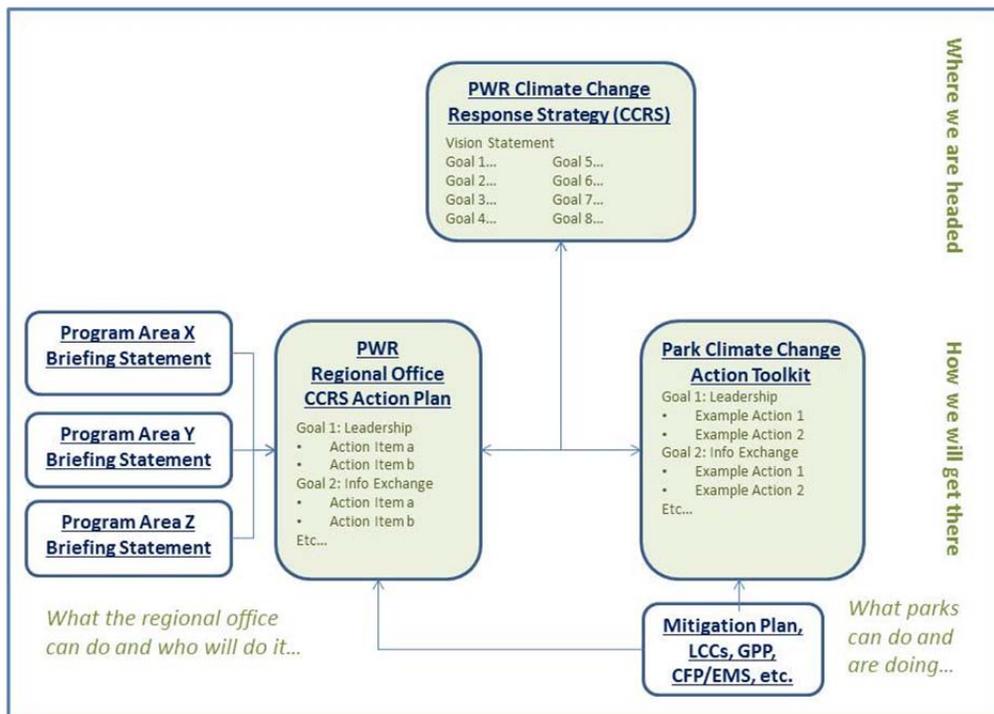
PWR Regional Office Climate Change Response Strategy Action Plan

The *PWR Regional Office CCRS Action Plan* identifies ways the regional office will strengthen park-specific responses through actions such as developing specific tools, bringing groups together, and sharing best practices and other information. This Action Plan articulates objectives that collectively support the goals and assigns actions to achieve the objectives. It directly connects to program area work plans through the Program Area Briefing Statements. Program Area Briefing Statements are used to clarify the connection between a given program area and the PWR climate change response strategy.

Park Climate Change Action Toolkit

Parks have consistently asked for examples of actions parks can take to meet climate change response goals, including information on what other parks are already doing. The Park Climate Change Action Toolkit seeks to meet this need by sharing examples of successful park climate change response actions. The Toolkit, to be developed in 2013, will capture example actions and recommendations that parks can take to further the PWR Climate Change Response goals. The format of this tool will be determined based on input from parks. The content will come from a variety of sources such as park input, the Green Parks Plan (GPP), the PWR Mitigation Plan, and Climate Friendly Park (CFP) materials.

FIGURE 1: COMPONENTS OF THE PWR CLIMATE CHANGE RESPONSE STRATEGY



Developing the Strategy

PWR Climate Change Coordination Committee (C4)

In July 2011, the PWR Regional Director established the Climate Change Coordination Committee (C4) to promote coordination, integration, and collaboration among the many climate change response activities now underway across the PWR. The committee is comprised of regional office program chiefs, a superintendent representative, and others involved in climate change work. A primary objective for C4 is to articulate and coordinate a regional climate change response strategy that serves as 1) a framework to help the entire region understand and talk about our collective response to climate change in a consistent way, and 2) a vehicle for the regional office to support and complement park efforts to address climate change.

“It is our responsibility to be thinking about these and other longer term questions and to be engaged in related discussions. The answers will impact park resources, which is why we are here.”

**Chris Lehnertz, PWR
Regional Director**

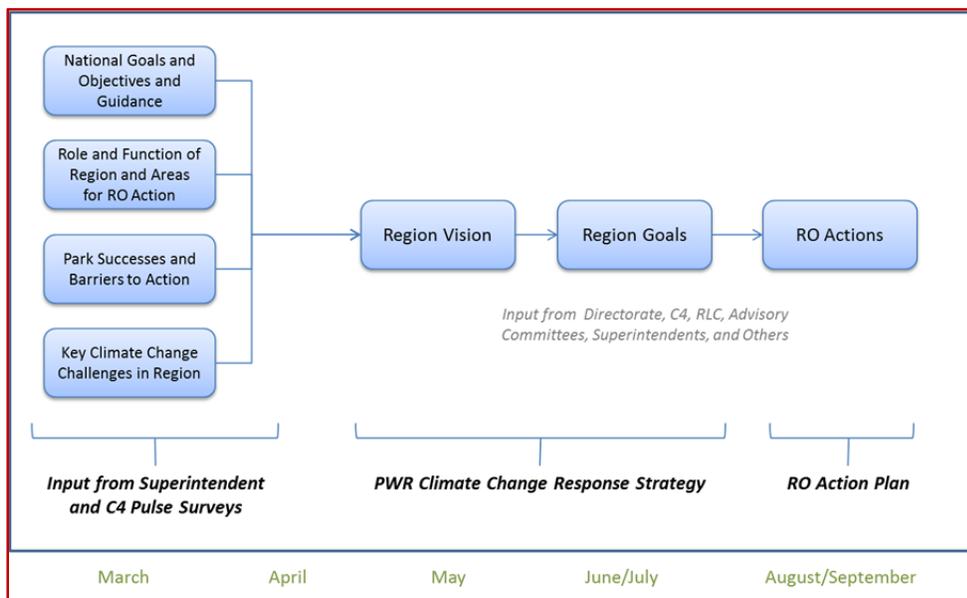


THE NEW VISITOR CENTER AT SANTA MONICA MOUNTAINS NATIONAL RECREATION AREA IS DESIGNED TO MINIMIZE CARBON FOOTPRINT

Input from Superintendents and Employee Surveys

The PWR Climate Change Response Strategy (CCRS) was developed by C4 with input from park and regional office staff. The process of developing the Strategy started in 2011 with gathering and synthesizing a variety of inputs (see Figure 2 below), including a survey sent to all superintendents requesting input on the challenges and opportunities associated with climate change response in their park. Next, the results of that survey were distilled into a draft vision and goal statements. The C4 then gathered input from regional advisory committees, the Regional Leadership Council (RLC), superintendents, and other subject matter experts in parks and programs to refine those regional goals and to detail the supporting regional office objectives and actions found in the PWRO Action Plan.

FIGURE 2: DEVELOPING THE PWR CLIMATE CHANGE RESPONSE STRATEGY - 2012 TIMELINE



Themes that Emerged from Employee Input

Over 30 people based in parks and 25 people from the regional office contributed to building this Strategy. The majority of this input was collected through interviews and meetings. Several themes emerged from the input, including:

- Barriers to advancing climate change response include not knowing how to prioritize actions, limitations of funding or staffing, and lack of access to innovations
- Support needed from the regional office includes providing training opportunities, providing funding for climate change actions, facilitating information flow, and providing leadership and guidance
- Interpretive and educational challenges include the need to improve staff climate change literacy, to address the perception of visitor disinterest in the topic, and the need for help connecting climate change to individual parks
- Other park needs include a platform for sharing information and understanding the interrelationships between agencies and partners

The PWR Strategy articulates integrated actions that respond to these themes.

Implementing the Strategy

This strategy is a “living document” and will evolve over time as C4 continues to seek and incorporate input from parks and advisory groups and to support progress on Regional Office Action Items. As the actions are implemented, C4 will track the progress and success of implementation, which will inform future iterations of the document.

A Continuous Process

Throughout the development of this strategy, many questions were raised. The region will continue to learn from discussion around these and other questions:

- *How is each visitor, partner, park, and program area affected by climate change? How does each stakeholder affect climate change?*
- *What can we, as a region, realistically do to address a changing global climate?*
- *What role does NPS play in building public understanding and acknowledgment of climate change?*
- *How do we build resilience in our park ecosystems and organization?*
- *What priority should climate change initiatives have vs. other NPS priorities?*
- *What barriers to action do we see in our region?*
- *How do we equip staff and visitors to take action?*
- *What must we do to effectively function in an interdisciplinary way?*
- *How do we work across jurisdictional boundaries?*

Building Capacity to Address Multi-Divisional Questions

Through the development of the vision and goals in this strategy, C4 has identified organizational capacities critical to implementing an effective regional response to a changing global climate and to building the regional offices’ organizational resilience more broadly.

- **Information sharing and application** – between programs and across region
- **Making connections** – connections between initiatives and groups, as well as between our individual duties and climate change response
- **Skill building** – learning and using new and improved tools and technologies
- **Collaborative problem solving** – both in person and remotely

Building organizational capacity strengthens the ability of an organization to effectively evolve. This need is particularly applicable to challenges, such as climate change, that involve a high level of uncertainty and rely on collaboration between individuals from different backgrounds, locations, organizations, and/or disciplines.

Achieving our vision requires new information and new partners. New challenges require new or better tools which require new skills. New technology requires updating existing business practices. The ability to manage organizational change over time will significantly contribute to successful implementation of the PWR climate change response strategy.

Organizational Capacity:

The abilities of organizations to perform core functions, solve problems, and achieve objectives. This includes the ability of an organization to assess and react to future needs in order to maintain relevance and effectiveness over time. [GESCI – “Organizational Capacity Audit Tool”]